

## CLAIMS:

1. A method for monitoring a system in which a datum-line display (11) is generated on a viewing screen (4) for at least one parameter of the system as follows:
  - logging of a variation with time of the values of the parameter concerned,
  - determination of a base value for the parameter concerned,
  - 5 - determination of an instantaneous deviation between the base value and the current parameter value or a current mean value of a specified group, containing the current parameter value, of consecutive parameter values,
  - creation of a baseline (14) representing the base value,
  - display of the baseline (14) on the viewing screen (4) in such a way that the
  - 10 baseline (14) extends horizontally on the viewing screen (4) and with a specified length,
  - creation of a continuous curve (15) that represents the variation with time of the parameter values for a specified time period and is normalized with respect to the baseline (14),
  - display of the continuous curve (15) on the viewing screen (4) in such a way
  - 15 that its time axis extends horizontally on the viewing screen (4) and that the continuous curve (15) on the viewing screen (4) essentially extends over the entire length of the baseline (14),
  - creation of a deviation bar (16) that represents the instantaneous deviation and is normalized with respect to the baseline (14),
  - display of the deviation bar (16) on the viewing screen (4) in such a way that it
  - 20 extends vertically on the viewing screen (4) from the level of the baseline (14).
2. A method as claimed in claim 1, characterized in that the datum-line display (11) has a trend arrow (17) that is generated as follows:
  - determination of the trend of the value variation with time in the current
  - 25 parameter value,
  - creation of the trend arrow (17), which represents the trend,
  - display of the trend arrow (17) on the viewing screen (4).

3. A method as claimed in claim 2, characterized in that the trend arrow (17) is displayed on the viewing screen (4) in such a way that it is disposed adjacently to one end of the continuous curve (15) on the viewing screen (4).

5 4. A method as claimed in claim 2 or 3, characterized in that the trend arrow (17) is displayed on the viewing screen (4) in such a way that it points upward in the case of a positive instantaneous slope and points downward in the case of a negative instantaneous slope.

10 5. A method as claimed in any one of claims 2 to 4, characterized in that the orientation of the trend arrow (17) depends on the value of the instantaneous slope.

6. A method as claimed in any one of claims 2 to 5, characterized in that the trend arrow (17) is disposed between the continuous curve (15) and the deviation bar (16) on  
15 the viewing screen (4), or in that the trend arrow (17) is disposed on the viewing screen (4) in such a way that the deviation bar (16) is situated between the trend arrow (17) and the continuous curve (15).

7. A method as claimed in any one of claims 2 to 6, characterized in that the  
20 trend arrow (17) points in the vertical direction at one end of the continuous curve (15) if the instantaneous slope has the value zero or is in a specified interval containing the value zero.

8. A method as claimed in any one of claims 1 to 7, characterized in that the display of the continuous curve (15) can be deactivated.

25 9. A method as claimed in any one of claims 1 to 8, characterized in that the deviation bar (16) extends on the viewing screen (4) adjacently to the more recent end of the continuous curve (15).

30 10. A method as claimed in any one of claims 1 to 9, characterized  
- in that the datum-line display (11) has a rectangular window (20) whose top side (23) and bottom side (24) extend parallel to the baseline (14) and have the same geometrical spacing in the vertical direction from the baseline (14),  
- in that a specified upper limit value for the parameter concerned is assigned to

the top side (23),

- in that a specified lower limit value for the parameter concerned is assigned to the bottom side (24),

- in that the continuous curve (15) and the deviation bar (16) are, in addition,  
5 normalized with respect to the upper limit value and the lower limit value.

11. A method as claimed in claim 10, characterized

- in that an upper limit-value line (25) representing the upper limit value is created and is displayed on the viewing screen (4) in such a way that it essentially extends  
10 over the entire length of the baseline (14) on the top side (23) of the rectangular window (20),  
- in that a lower limit-value line (26) representing the lower limit value is created and is displayed on the viewing screen (4) in such a way that it essentially extends over the entire length of the baseline (14) on the bottom side (24) of the rectangular window (20).

12. A method as claimed in claim 10 or 11, characterized in that the limit values have different numerical spacings from the base value although the top side (23) and the bottom side (24) have the same geometrical spacing from the baseline (14) on the viewing screen (4).

13. A method as claimed in any one of claims 1 to 12, characterized in that the continuous curve (15) does not cover the current parameter value, but those parameter values that precede the current parameter value in a specified time period.

14. A method as claimed in any one of claims 1 to 13, characterized in that a separate datum-line display (11a, 11b, 11c, 11d, 11e) is generated in each case for a plurality of different parameters in such a way that a plurality of datum-line displays (11a, 11b, 11c, 11d, 11e) are disposed horizontally next to one another on the viewing screen (4) and in that the baselines (14) of horizontally adjacent datum-line displays (11a, 11b, 11c, 11d, 11e) are  
25 disposed coaxially in alignment with one another on the viewing screen (4).  
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15. A method as claimed in claims 10 and 14, characterized

- in that the top sides (23) of the rectangular windows (20) of horizontally adjacent datum-line displays (11a, 11b, 11c, 11d, 11e) are disposed coaxially in alignment

with one another on the viewing screen (4),

- in that the bottom sides (24) of the rectangular windows (20) of horizontally adjacent datum-line displays (11a, 11b, 11c, 11d, 11e) are disposed coaxially in alignment with one another on the viewing screen (4).

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16. A method as claimed in any one of claims 1 to 15, characterized in that at least one parameter can be selected from a plurality of different parameters of the system for which parameter or parameters a datum-line display (11) is generated in each case.

10 17. A method as claimed in any one of claims 1 to 16, characterized in that the system to be monitored is a patient.

18. A device suitable for performing the method as claimed in any one of claims 1 to 17.

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19. A device as claimed in claim 18, characterized in that the device (1) has at least one computer (2) in which a computer program (8) runs that is suitable for activating the device (1) to perform the method as claimed in any one of claims 1 to 17.

20 20. A computer program that, if it is running in a computer (2) of a device (1) as claimed in claim 18 or 19, is suitable for activating said device (1) to perform the method as claimed in any one of claims 1 to 17.